

What is claimed is:

1 1. An ink fountain assembly for use in duplicating machines, such
2 as rotary offset lithographic machines, comprising a fountain trough defined by an
3 elongated blade and an ink fountain roller defining a gap there between, a
4 proximal edge of said blade being rigidly retained and a distal edge of said blade,
5 adjacent said roller, engaging a portion of a frame and being initially flexed and
6 prestressed toward said roller to define said gap, and means to vary the gap and
7 the ink flow therethrough.

1 2. An ink fountain assembly according to claim 1 wherein said means to
2 vary the gap includes a plurality of metering screws which apply additional flexure to
3 said blade.

1 3. An ink fountain assembly according to claim 2 wherein a hardened
2 roller is interposed between each metering screw and said blade.

1 4. An ink fountain assembly according to claim 3 wherein said hardened
2 rollers are provided in a slot in said frame and are separated by a spacing strip.

1 5. An ink fountain assembly according to claim 1 wherein the proximal
2 edge of said blade is fixed to a mounting bar and means to vary the position of said
3 mounting bar relative to the frame to thereby vary the initial flex and prestress of
4 said blade.

1 6. An ink fountain assembly according to claim 1 wherein said fountain
2 trough is further defined by ink fountain side plates, said ink fountain roller being
3 mounted in bearings at its end, a lock-up arm functionally mounted on each bearing,
4 each lock-up arm being pivotally moveable from a first raised position to a locked
5 position, said side plates having recessed end portions engaging said bearings and
6 having projections engaged by each lock-up arm when said arm is in its locked

7 position, a screw threaded through a portion of each lock up arm and engaging each
8 projection to take up manufacturing and assembly tolerances and precisely set the
9 blade relative to the fountain roller.

1 7. An ink fountain assembly according to claim 6 wherein said recessed
2 end portions have flat chordal areas which provide a two point V-shaped contact
3 with the bearing.

1 8. An ink fountain assembly according to claim 6 wherein said side plates
2 rest on a cross-bar extending between side plates of a duplicating machine and the
3 fountain assembly is removably attached to said duplicating machine by said cross
4 bar and the recessed end portions of said side plates.

1 9. An ink fountain assembly according to claim 1 including clamping
2 means to clamp a proof sheet across the length of said fountain assembly.

1 10. An ink fountain assembly according to claim 9 wherein said clamping
2 means comprises a spring biased clamping bar extending laterally within a pocket
3 in said frame.